

Appln. No. Serial No. 09/802,168
Amtd. Dated 10/3/2005
Fifth Response in Appln, Reply to Office Action of 5/3/2005
Page 7 of 9

REMARKS

Claims 1-15 are pending in this application. The Examiner rejected Claims 1, 2, 5, and 7 under 35 U.S.C. 102(b) and rejected Claims 3, 4, 6, and 8-15 under 35 U.S.C. 103(a). Independent Claims 1 and 11 have been amended in the foregoing amendment.

**Masetti and Amersfoort Do Not Show or Suggest
the Invention of Claims 1 and 11**

The Examiner rejected Claim 1 under 35 U.S.C. 102(b) as anticipated by "Optical Fiber Buffer for High-Performance Broadband Switching," Masetti et al. ("Masetti"), and rejected Claim 11 under 103(a) as unpatentable over Masetti in view of U.S. Patent No. 5,748,811 to Amersfoort et al. ("Amersfoort"). Applicants traverse these rejections for the reasons discussed below.

Claim 1

The optical signal processing device of amended Claim 1 requires, among other elements, an optical gate configured to gate the optical signals outputted from the optical combiner or entered into the optical delay waveguide array, such that parts of the optical signals of different sets are extracted during a prescribed time-slot region. See Figures 3 and 10 and page 7, line 9 to page 8, line 21, and page 13, line 32 to page 14, line 18 of the present specification.

In contrast, Masetti describes an optical fiber buffer device in which optical gates are provided on the delay lines connected to the fiber splitter. The signals on the delay lines are respectively delayed and a part of each delayed signal is extracted by the optical gates which are operated at different timings and different time intervals, and then the extracted parts are combined and outputted. The optical gates of Masetti are opened or closed at respectively different timings and time intervals. As described at page 96 left column, lines 27-33, "(t)he gates are activated/de-activated at the packet rate synchronously with the optical packets (time-slotted operation), using a gating sequence generator which provides a pre-

Appln. No. Serial No. 09/802,168

Amdt. Dated 10/3/2005

Fifth Response in Appln, Reply to Office Action of 5/3/2005

Page 8 of 9

programmed activation/de-activation sequence of duration T (or a multiple of T), so that only one gate is in the on state at a time" (emphasis added). The optical gates of Masetti teach away from the claimed invention since Masetti describes that only one gate is on at a time, whereas Claim 1 requires that the optical signals of different sets are extracted during the same time slot. Thus, Claim 1 is not anticipated by Masetti and Claim 1 should be allowed.

Claim 11

The optical signal processing device of amended Claim 11 requires a plurality of optical gates configured to gate the optical signals respectively provided on the optical delay waveguides and configured to gate the optical signals entered into the optical delay waveguide array, such that parts of the optical signals of different sets are extracted during a prescribed time-slot region.

As described above in relation to Claim 1, Masetti fails to describe that parts of the optical signals of different sets are extracted at the same time. Amersfoort describes an optical filter or router, which uses an optical cross-connect switch. However, Amersfoort does not show or suggest any possible use of such an optical cross-connect switch in the optical fiber buffer device of Masetti. Thus, there is no motivation to combine Masetti and Amersfoort.

Accordingly, amended Claim 11 would not have been obvious to one of ordinary skill from Masetti and Amersfoort at the time Applicants made the claimed invention. Thus, amended Claim 11 should also be allowed.

Claims 2-10 and 12-15

Claims 2-10 and 12-15 depend from independent Claims 1 and 11. The remarks made above in support of the patentability of the independent claims are equally applicable to distinguish the dependent claims from the cited references. Thus, Claims 2-10 and 12-15 should also be allowed.

Appn. No. Serial No. 09/802,168

Amdt. Dated 10/3/2005

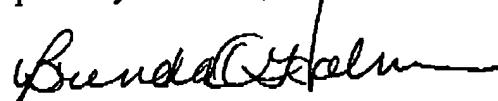
Fifth Response in Appn, Reply to Office Action of 5/3/2005

Page 9 of 9

CONCLUSION

The foregoing is submitted as a complete response to the Office Action identified above. This application should now be in condition for allowance, and the Applicants solicit a notice to that effect. If there are any issues that can be addressed via telephone, the Examiner is asked to contact the undersigned at 404.685.6799.

Respectfully submitted,



By: Brenda O. Holmes
Reg. No. 40,339

KILPATRICK STOCKTON LLP
1100 Peachtree Street, Suite 2800
Atlanta, Georgia 30309-4530
Telephone: (404) 815-6500
Facsimile: (404) 815-6555
Our Docket: 44471/254519